

Solve each equation.

218.  $\log_5(x - 2) = \log_5(2x - 8)$

219.  $\log_4(2x + 7) = \log_4(4x - 9)$

220.  $\log_3 4x + \log_3 2 = 3$

221.  $\log_2 x + \log_2(x - 3) = 2$

222.  $3\log_6 x - \frac{1}{2}\log_6 9 = 2$

223.  $2\log_5 x - 2\log_5 5 = 3$

224.  $\log_3 x - \log_3 4 = \log_3 16$

225.  $\log_3 x^2 + \log_3 x = \log_3 27$

226.  $2\log_3 x - \log_3 9 = \log_3 25$

227.  $\log_3(2x + 3) + \log_3(x - 2) = \log_3 72$

Solve for the variable. Round to the nearest thousandth.

228.  $8^x = 21$

229.  $9^{b-6} = 42$

230.  $19^{3d-1} = 40$

231.  $2^{5-n} = 7^n$

232.  $18^{t+1} = 32^{t-1}$

Find the approximate value to the nearest hundredth:

233.  $\log_3 10$

234.  $\log_5 20$

235.  $\log_6 30$

236.  $\log_9 40$